

Appl. No. 09/844,097

Amendments to the Specification

Please amend the Substitute Specification at page 4, lines 10-30 to read as follows:

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

Fig. 1 is a longitudinal sectional view of a schematic structure of an FPC of the conventional art ~~and the present invention.~~

Fig. 2 is a longitudinal sectional view of a schematic structure of an FPC of the present invention.

Fig. 2 3 is a schematic view showing the FPC of the present invention and a method for fatigue test of the FPC of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

The FPC 10 of the present invention whose basic structure is ~~the same as the structure~~ shown in Fig. ~~1~~ 3 is prepared by providing a base film side adhesive layer 12 ~~2~~ on a base film ~~1~~ 11, providing a metal foil layer 3 ~~13~~, on which a pattern circuit is formed, on the base film side adhesive layer ~~2~~ 12, and adhering a cover layer film 5 ~~15~~ on which a cover layer side adhesive layer ~~4~~ 14 is applied.

Furthermore, at least one adhesive used in either the base film side adhesive layer ~~2~~ 12 or the cover layer side adhesive layer ~~4~~ 14 is an epoxy resin adhesive and the epoxy resin adhesive is adjusted so that its glass transition temperature (Tg) is higher than an operating temperature.

When the glass transition temperature (Tg) of the adhesive 12 ~~or~~ 14 is adjusted so as to be higher than an operating temperature, it is controlled so that the adhesive softens at operating temperature, and therefore peeling between layers is prevented. Particularly, almost no local distortion to the metal foil layer 3 ~~13~~ on which the pattern circuit is formed is generated, and therefore, flexibility is stably obtained.

Please amend the Substitute Specification at page 5, lines 23-25 to read as follows:

An example of the present invention will be explained in detail while comparing to comparative examples as follows. Fig. 2 ~~3~~ is a schematic diagram showing a method of fatigue test of the present invention.

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Please amend the Substitute Specification at page 6, lines 4-19 to read as follows:

The structure of each sample FPC is ~~approximately the same as the structure shown in Fig. 4 3~~. The base film ~~4 11~~ and the cover layer film ~~5 15~~ of each FPC ~~10~~ is made of a polyimide resin film and the thickness of each film is 25 μ m. The thickness of each adhesive layer is 15 μ m and the thickness of the metal foil layer ~~3 13~~ on which the pattern circuit is formed is 36 μ m.

Table 1 shows the relation between glass transition temperatures (Tg) of the adhesives to be used and the storage modulus of the adhesive layer at the test temperature (within ordinary temperature at 90°C) which is assumed to be an operating temperature, including the FPC of the example of the present invention (examples 1 to 3) and the FPC of the comparative example (comparative examples 1 and 2). The FPC of each example (examples 1 to 3) according to the present invention uses the epoxy resin adhesive as an adhesive for the base film side (CCL side) adhesive layer ~~2 12~~ and the cover layer side (CL side) adhesive layer ~~4 14~~, wherein the glass transition temperature of the epoxy resin adhesive is higher than that of the ordinary epoxy resin adhesive. The FPC of each comparative example (comparative examples 1 and 2) uses the ordinary adhesive which has been used.